

PRIMARILY for TRAINING



C.L.W. Curlew Flying at Gravesend : Original Features of Design : Excellent Control Apparent

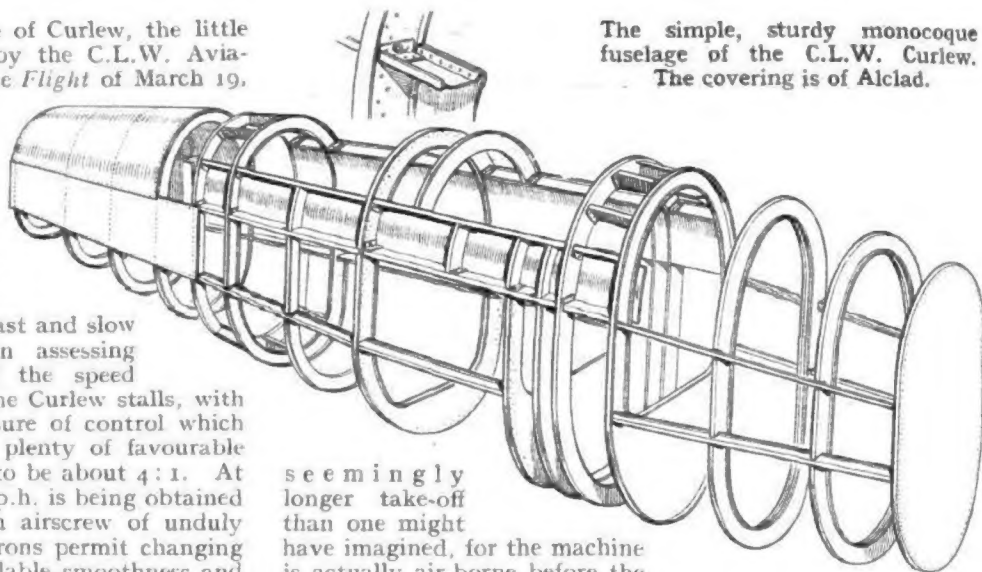
WITH the aptly chosen type-name of Curlew, the little T.I training monoplane built by the C.L.W. Aviation Co., Ltd., of Gravesend (see *Flight* of March 19, 1936) is now completing preliminary test flights which promise to excel the most sanguine hopes of its constructors. Although at the time of the demonstration at Gravesend last Thursday the machine was flying under a restricted licence, which permitted no aerobatics, its performance promised quite exceptionally well. Capt. A. N. Kingwill was the demonstrator, and his exhibition of fast and slow flying left little to the imagination in assessing the qualities of control at both ends of the speed range. Loaded to about 14lb./sq. ft., the Curlew stalls, with flaps down, at 38 m.p.h., and the measure of control which persists at speeds of that order evoked plenty of favourable comment. The gliding angle is claimed to be about 4:1. At the upper end of the speed range (125 m.p.h. is being obtained with the Pobjoy Niagara III driving an airscrew of unduly fine pitch) the short span and Frise ailerons permit changing from one bank to another with commendable smoothness and celerity.

Structurally, it will be remembered, the Curlew is a cantilever low-wing monoplane with a wing of patent design. Tapering both in plan form and thickness this is built round a single main spar and consists of an open box-like structure, the front and rear members being inter-connected and affixed to the spar with cantilever ribs. Upper and lower surfaces are provided with diagonal cross bracing. The manually operated flaps extend from aileron to aileron.

Alclad covering is used for the stressed skin monocoque fuselage from which the tail plane, and fin, are readily detachable. Metal covering is employed throughout except for the main wing panels.

The undercarriage legs have a 3in. compression and 6in. travel and there, without a doubt, lies the reason for a

The simple, sturdy monocoque fuselage of the C.L.W. Curlew. The covering is of Alclad.



seemingly longer take-off than one might have imagined, for the machine is actually air-borne before the wheels leave the ground. Sqn.

Ldr. F. W. H. Lerwill, one of the directors of the C.L.W. Aviation Co., Ltd., who knows far more about flying training than most people, does not advocate brakes in a primary trainer, reasoning that they result in more gadgets and are liable to lead an embryo pilot into trouble.

The design has been planned for almost any engine up to 140 h.p. and it is likely that the Gipsy Major will be fitted in some future machines of the type. The 90/95 h.p. Pobjoy Niagara III has the new model deep-chord Pobjoy cowling and dual engine-driven pumps.

The tare and gross weights of the prototype are respectively 970lb. and 1,500lb.

A general arrangement drawing appeared in *Flight* of March 19 last.



It will be gathered from a comparison of the two photographs on this page that the undercarriage of the Curlew has a long travel. Note also the unusually roomy cockpits.